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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,290	11/30/2001	Kazuaki Kidokoro	016887-1054	2651

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EXAMINER

HANG, VU B

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/997,290	KIDOKORO ET AL.	
	Examiner	Art Unit	
	Vu B. Hang	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-12 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-12 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- This office action is responsive to the following communication: Amendment filed on 06/08/2006.
- Claims 1-5, 7-12 and 17-20 are pending.

Response to Arguments

Applicant's arguments filed 06/08/2006 have been fully considered but they are not persuasive. Regarding **Claims 1, 7, 8 and 17**, Canon discloses a communication system in which information concerning device capabilities can be retrieved (see Col.4, Line 19-22) and performing OCR to generate text information if the device display cannot display information other than text due to its limited display capabilities (see Col.4, Line 30-40). Canon further suggests that the system for performing optical character recognition is a built-in component that could be placed into a client terminal device in the system (see Col.4, Line 30-34). At the time of the invention, it would have been obvious for one skilled in the art to place the optical character recognition system at the client terminal devices for the purpose of establishing a simple and direct communication between the image reading device and the client terminal device. This would eliminate the need of a middle image-processing system (built in a server) where the system must be configured to handle various display capabilities of the terminal devices. Therefore, the previous rejections are being maintained for Claims 1, 7, 8, and 17.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 7-8, 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomat (US Patent 6,459,499 B1) in view of Cannon et al. (US Patent 5,974,447).

Regarding **Claims 1 and 8**, Tomat discloses an image reading system (see Fig.1 and Fig.2) comprising: a client terminal device which comprises an image display which has predetermined image display capability and displays an image (see Fig.1 (10) and Col.2, Line 11-17), and a transfer unit for transferring information concerning the capability (see Fig.2 (19,31) and Col.4, Line 51-52), and an image reading apparatus which comprises an image processing content determinator for receiving the information concerning the capability transferred from the transfer unit, and determining the capability of the client terminal device (see Fig.2 (15) and Col.2, Line 46-51), an image reader for reading an image to generate first image data (see Fig.2 (1)), an image processor for performing, on the first time image data, image processing corresponding to the capability determined by the image processing content determinator, and generating second image data (see Fig.2 (15,49,50) and Col.2, Line 46-56), and an image data transfer unit for transferring the second image data to the client terminal device (see Fig.2 (46,47) and Col.2, Line 54-56).

Tomat fails to expressly disclose the transferring of information indicating whether the image display can display information other than characters, and if the information indicates that

the display cannot display information other than characters, an OCR processing is performed by the image reading apparatus on the first image data and generate character information as the second image data. Cannon, however, discloses a communication system in which information concerning device capabilities can be retrieved (see Col.4, Line 19-22) and performing OCR to generate text information if the device display cannot display information other than text due to its limited display capabilities (see Col.4, Line 30-40).

Tomat and Cannon are combinable because they are from the same field of endeavor, namely image communication systems. At the time of the invention, it would have been obvious for one skilled in the art to include to the image reading system a mechanism for determining whether the image display of a client terminal device can display information other than characters, and if determined that only characters can be displayed, allowing for the image reading apparatus to perform OCR on the first image data to generate character information as the second image data. The motivation for doing so would be to ensure that the client terminal device could display the text within an image being scanned by the image reading apparatus. With the display capability information provided and the presence OCR system in the image reading apparatus, the client terminal device can display the scanned image information in accordance to its display capabilities.

Regarding **Claims 3 and 10**, Tomat further discloses that the client terminal device transfers, to the image reading apparatus, information indicating whether the image display is monochromatic or color display (see Fig.5 (122) and Col.8, Line 35-39), and if it is color display, information concerning the color depth will be transferred as information concerning capability (see Col.8, Line 35-39). Tomat also discloses that the image reading apparatus

generates the second image data by performing, on the first image data, color/monochromatic conversion (see Fig.5, (122), Fig.6 (149) and Col.2, Line 46-56) and if the image display is a color display, color depth conversion, in accordance with the information (see Col.8, Line 35-39).

Regarding **Claim 7**, Tomat discloses an image reading system (see Fig.1 and Fig.2) comprising: a client terminal device which comprises an image display which has predetermined image display capability and displays an image (see Fig.1 (10) and Col.4, Line 26-31), and a transfer unit for transferring information concerning the capability and information concerning a destination of first image data (Fig.1 (15), Fig.2 (47) and Col.5, Line 21-23); an image processing content determinator for receiving the information concerning the capability transferred from the transfer unit, and determining the capability of the client terminal device (see Fig.2 (15) and Col.2, Line 46-51); an image reader for reading an image to generate the first image data (see Fig.2 (1)); an image processor for performing, on the first image data, image processing corresponding to the capability determined by the image processing content determinator, and generating second image data (see Fig.2 (15) and Col.2, Line 46-56); and an image transfer unit for transferring the second image data to the client terminal via a network, and transferring the first image data to the transfer destination of the first image data via the network (see Fig.2 (47) and Col.2, Line 46-56).

Tomat fails to expressly disclose the transferring of information indicating whether the image display can display information other than characters, and if the information indicates that the display cannot display information other than characters, an OCR processing is performed by the image reading apparatus on the first image data and generate character information as the

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second image data. Cannon, however, discloses a communication system in which information concerning device capabilities can be retrieved (see Col.4, Line19-22) and performing OCR to generate text information if the device display cannot display information other than text due to its limited display capabilities (see Col.4, Line 30-40).

Tomat and Cannon are combinable because they are from the same field of endeavor, namely image communication systems. At the time of the invention, it would have been obvious for one skilled in the art to include to the image reading system a mechanism for determining whether the image display of a client terminal device can display information other than characters, and if determined that only characters can be displayed, allowing for the image reading apparatus to perform OCR on the first image data to generate character information as the second image data. The motivation for doing so would be to ensure that the client terminal device could display the text within an image being scanned by the image reading apparatus. With the display capability information provided and the presence OCR system in the image reading apparatus, the client terminal device can display the scanned image information in accordance to its display capabilities.

Regarding **Claim 17**, Tomat discloses an image reading apparatus (see Fig.2) comprising: an image processing content determinator for receiving information concerning a capability of an image display from a client terminal device having the image display (see Fig.2 (50) and Col.2, Line 33-41), and determining the capability of the client terminal device (see Col.2, Line 46-51); an image reader for reading an image to generate first image data (see Fig.2 (1) and Col.2, Line 51-54); an image processor for performing, on the first image data, image processing corresponding to the capability determined by the image processing content

determinator (see Col.2, Line 51-54), and generating second image data (see Col.2, Line 51-54); and an image transfer unit for transferring the second image data to the client terminal device (see Fig.2 (47) and Col.2, Line 54-56).

Tomat fails to expressly disclose the transferring of information indicating whether the image display can display information other than characters, and if the information indicates that the display cannot display information other than characters, an OCR processing is performed by the image reading apparatus on the first image data and generate character information as the second image data. Cannon, however, discloses a communication system in which information concerning device capabilities can be retrieved (see Col.4, Line19-22) and performing OCR to generate text information if the device display cannot display information other than text due to its limited display capabilities (see Col.4, Line 30-40).

Tomat and Cannon are combinable because they are from the same field of endeavor, namely image communication systems. At the time of the invention, it would have been obvious for one skilled in the art to include to the image reading system a mechanism for determining whether the image display of a client terminal device can display information other than characters, and if determined that only characters can be displayed, allowing for the image reading apparatus to perform OCR on the first image data to generate character information as the second image data. The motivation for doing so would be to ensure that the client terminal device could display the text within an image being scanned by the image reading apparatus. With the display capability information provided and the presence OCR system in the image reading apparatus, the client terminal device can display the scanned image information in accordance to its display capabilities.

Claims 2, 4-5, 9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomat (US Patent 6,459,499 B1) in view of Cannon et al. (US Patent 5,974,447), and in further view of Kajita et al. (US Patent 6,069,706).

Regarding **Claims 2 and 9**, Tomat and Cannon disclose the image reading system of Claim 1 but fail to expressly disclose the transfer of information concerning the image size of the image display as the information concerning the capability, and the image reading apparatus generates the second image data by enlarging or reducing the first image data in accordance with the information. Kajita, however, discloses the image size information (see Col.6, Line23-25) as well as having the image reading apparatus either enlarge or reduce the image data in response to the size information (see Col.7, Line 49-51).

Tomat, Cannon and Kajita are combinable because they are from the same field of endeavor, namely image communication systems. At the time of the invention, it would have been obvious for one skilled in the art to include the image size information as part of the predefined device profile information and having the image reading apparatus to resize the image data based on the image size information. As known in the art, client devices tend to have different displaying capabilities and it is obvious that one of the capabilities deals with image size. It is also known the art that image sizes can be manipulated at either the remote client computer or at the image reading apparatus.

Regarding **Claims 4 and 11**, Tomat and Cannon disclose the image reading system of Claim 1 but fail to expressly disclose information concerning the capacity of buffer memory as information concerning the capability of the client terminal device, and generating second image data by performing processing on the first image data, based on the memory capacity

information. Kajita, however, further discloses the image buffer display memory capacity information of an image display device as the capability information for the device (see Col.6, Line 28-32).

Tomat, Cannon and Kajita are combinable because they are from the same field of endeavor, namely image communication systems. At the time of the invention it would have been obvious for one skilled in the art to include the display buffer memory capacity information as information concerning the capability of the client terminal device. It is known in the art that image display devices contain display buffer memory. Therefore, the information concerning the buffer memory capacity would allow the image reading system to determine if the processed image data can be transferred to the terminal device. A terminal device with a buffer memory capacity less than the image data size would not be able to store the image data being transferred. Therefore, it is obvious to include the image display buffer memory capacity information as the capability information for the client terminal device.

Regarding **Claims 5 and 12**, Tomat and Cannon disclose the image reading system of Claim 1 but fail to expressly disclose information concerning the image data file size as information concerning the capability of the terminal device, and generating second image data by performing processing on the first image data, based on the image data file size information. Kajita, however, further discloses information concerning the image data file size in the image display (see Col.6, Line 28-32).

Tomat, Cannon and Kajita are combinable because they are from the same field of endeavor, namely image communication systems. At the time of the invention it would have been obvious for one skilled in the art to include the image data file size information as

information concerning the capability of the client terminal device. It is known in the art that the image data file size must meet certain requirements for the image display device. This information is necessary since conversion of the image data file into specific format (i.e. JPEG) requires file size information. Therefore, it is obvious to include the image data file size information as the capability information for the client terminal device.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomat (US Patent 6,459,499 B1) in view of Cannon et al. (US Patent 5,974,447), and in further view of Nason et al. (US Patent 6,437,809 B1).

Regarding **Claims 18 and 19**, Tomat and Cannon discloses the image reading system of Claim 1 but fail to disclose that the client terminal device comprises a user input and display unit for displaying and changing the capability information of the device. Nason, however, discloses a controller and user interface for displaying and changing the resolution parameters of a display monitor (see Fig.14, Col.2, Line 10-26 and Col.9, Line 23-32).

Tomat, Cannon and Nason are combinable because they are from the same field of endeavor, namely image communication systems. At the time of the invention it would have been obvious for one skilled in the art to include to the client terminal device a user input and display unit for displaying and changing the capability information of the device. The motivation would be to allow the user to set the appropriate display parameters at the terminal device to display a particular image that may require a different level of resolution.

Regarding **Claim 20**, Tomat and Cannon discloses the image reading system of Claim 1 but fail to disclose displaying, at the terminal device, information concerning the capability of the client device; receiving user inputs for changing the capability information; and transferring

the changed capability information to the image processor. Nason, however, discloses a controller and user interface for displaying and changing the resolution parameters of a display monitor (see Fig.14, Col.2, Line 10-26 and Col.9, Line 23-32); and the transfer of the changed resolution information to an image processor (see Fig.12 (182) and Col.4, Line 7-8).

At the time of the invention it would have been obvious for one skilled in the art to include to the client terminal device a user input and display unit for displaying and changing the capability information of the device. The motivation would be to allow the user to set the appropriate display parameters at the terminal device to display a particular image that may require a different level of resolution. It is further obvious that the changed capability information would be transferred to the image processing system within the terminal device for displaying an image based on the changed parameters. Without the information transfer, the image cannot be displayed in accordance to the display settings set by the user.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu B. Hang whose telephone number is (571) 272-0582. The examiner can normally be reached on Monday-Friday, 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vu Hang
Assistant Examiner



JOSEPH R. POKRZYWA
PRIMARY EXAMINER